USE OF WHEAT FLOUR SUBSTITUTES IN BAKING

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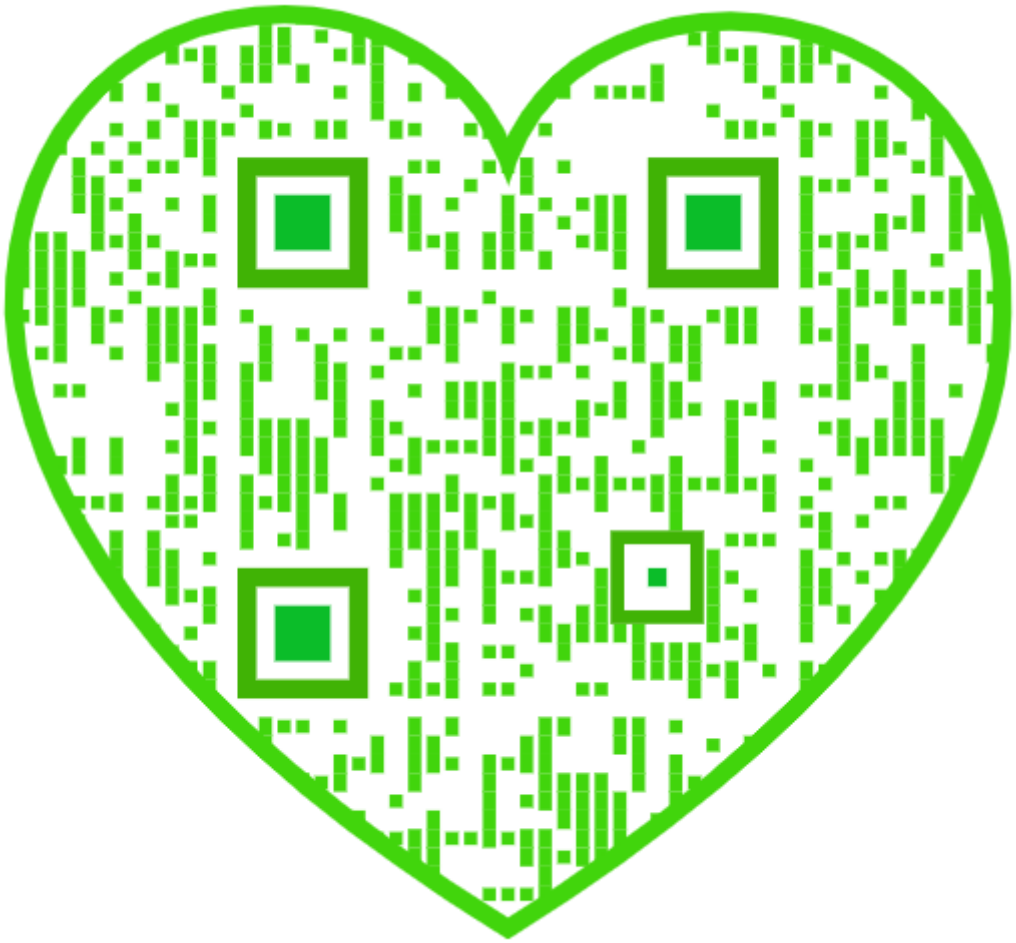

TO CONSERVE wheat is not a hardship to the American people. With abundant crops of corn, rice, potatoes, oats, barley, buckwheat, kafir, milo, feterita, peas, beans, peanuts, etc., any one of which may be used in larger or smaller amounts in place of wheat flour, there is no danger of hunger or a lack of bread. Every housewife, therefore, is urged to use some substitute for part of the wheat flour in whatever bread, biscuits, muffins, pastry, etc., she prepares, thereby joining the ranks of those who are helping to win the war. Such breads will have even greater nutritive value than if made from flour alone. In fact, many believe that for food purposes a mixture of different grains is better than one kind alone. In using wheat substitutes, therefore, locally grown products should be used as far as possible. All unnecessary shipment of materials should be avoided, so that transportation facilities may be reserved to the greatest degree for the needs of our soldiers and essential war business. Furthermore, almost every section of our country produces in abundance some crop other than wheat, and to market this at home rather than at a distance would prove an economic benefit to such localities.

The following pages suggest some of the ways in which substitutes for wheat flour may be used in baking.

USE OF WHEAT-FLOUR SUBSTITUTES IN BAKING.

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PARTIAL SUBSTITUTES FOR WHEAT FLOUR IN BREAD MAKING.

THOUGH wheat is the leading bread cereal, flour or meal made from any of the other grains, or from dried peas, beans, potatoes, nuts, etc., when mixed with a certain proportion of wheat flour, will make good bread.

As used in discussing food situation and other dietary problems, "wheat substitute" means any flour, meal, or other grain product, potato or other vegetable (raw or cooked), or similar food material which can be used alone or in combination with wheat flour for making bread, biscuit, pastry, and other similar foods, or which can be used in the diet to replace wheat foods, wholly or in part. Local food customs and the available supply will in large measure determine what the housekeeper will use, and her success in using them will depend largely upon her skill in planning meals and her ability to make palatable and satisfactory dishes from a wide variety of materials.

Common foods which can be so used to replace wheat in cooking and in meal planning include corn, barley, rice, rye, Kafir, milo, feterita, beans, soy beans, peanuts, potato, sweet potato, dasheen, banana, pumpkin, squash, etc. However, in choosing a wheat substitute one must consider not only the suitability of the food for the purpose, but also its relation to general questions on food conservation. Indeed, at the present time the term "wheat substitute" has come to be used in a restricted sense, meaning those foods out of the possible number of wheat substitutes which the United States Food

[1] The material in this bulletin is based mainly on the results of a technical study of wheat flour substitutes carried on under the direction of Dr. J. A. LeClerc, of the Bureau of Chemistry.

Administration specifies as most advantageous for the purpose at a given time. The list so specified will vary from time to time according to market conditions and other factors which enter into the problem. The requirements of the Food Administration are made known in many ways and the housekeeper can keep herself informed by noting the statements which appear in the public press and by asking for information from her State food administrator and other local representatives of Food Administration work.

With wheat substitutes the bread texture is not so pleasing and the loaf usually smaller. However, as much as 25 per cent wheat substitute will yield a "light" yeast bread of good quality, while up to 50 per cent can be used to make excellent "quick" or hot breads. Most yeast breads are of larger volume and better texture and quality when made with cooked wheat substitutes (boiled or baked potatoes, corn-meal mush, cooked rice, etc.) than with raw foods. This suggests a new use for left overs.

Although special recipes are not necessary for using wheat substitutes, they are often convenient. The following are only a few of the many possible ones and merely suggest some combinations of food materials which will yield palatable breads. Shortening is omitted as not essential to yeast bread, milk (either whole or skimmed) if procurable is recommended, as it improves quality, and for some breads sirup is recommended in place of sugar. All measurements given are level.

YEAST BREADS.

General instructions.—To assure success in bread making it is important to maintain absolute cleanliness with regard to the materials used, as well as the utensils and the hands. The flour should be sound and free from foreign odor and taste.

Compressed yeast should be as fresh as possible and free from any odor other than the well-known yeasty odor. It should be fairly soft, but should break easily. It should never be mixed with any liquid which is more than lukewarm. Liquid yeast should always be kept covered and in a cool place. It should also have only a yeasty odor and should not be kept more than two weeks without freshening. During the summer season it is difficult to keep liquid yeast and in many places compressed yeast can not be secured. One cake of dry yeast will serve the same purpose as one of compressed yeast if the long-sponge process be used. Dry yeast must be soaked in water for 20 minutes to 1 hour before using to bring the yeast cells back to an active state. The use of dry yeasts calls for the long-fermentation method to give time for sufficient growth of yeast cells to make the dough light.

If milk (whole or skimmed) is used in bread making it should be scalded and cooled until lukewarm before adding it to the dough. In setting a sponge overnight it is better not to use milk.

If a sponge is set at night it should be kept at ordinary room temperature or less, depending upon how long it is to stand (from 60° to 75° F.). If the "straight-dough method" is used, or whenever a *dough* (as distinguished from a sponge) has been prepared, the temperature should be fairly warm, i. e., between 80° and 88° F. The time for rising required in the following recipes depends upon such temperature being maintained.

The dough should always be kept covered with a lid or plate, in order to prevent the formation of a crust on top. When thus covered it is unnecessary to grease the surface of the dough.

When molding the loaves a bit of dough[1] should be pinched off, shaped into a ball, and placed in a small jelly glass having straight sides. Its volume when placed in the glass should be noted and the glass marked at twice and three times this volume. This "indicator" should be set alongside the pans while the loaves are rising. When spring or hard winter wheat flours alone are used in bread making, the dough in the indicator should rise to three times the original volume and the loaves then be placed in the oven. When soft winter wheat flour is used, such as is generally found in the South, in the States east of the Mississippi, and on the Pacific coast, the indicator should show about two and a half times the original volume when the loaves are ready for baking,

For a so-called "standard" homemade loaf 1 cup liquid and about 3 to 3½ cups flour are required. The exact amount of flour for a given amount of liquid (or vice versa) can not be given in these recipes, since there is so much variation in this respect among different flours, and even in the same flour at different times. The most satisfactory pan for this amount of dough should hold 3 pints and would be approximately 7½ inches long and 3½ inches wide and 3½ inches deep. Bake loaves of this size about 50 minutes.

The heat of the oven should be about 425° F. at first and then gradually decreased until about 375° F. near the end of the baking. If no oven thermometer is at hand, test the oven by means of a little flour. Place 1 level teaspoon of flour in a small tin, like the lid of a jelly glass, spreading it in a layer about ¼ inch thick. Place this in the oven, and if the heat is right for bread baking the flour will become golden brown throughout within 5 minutes.[2] A pan of water

[1] This ball of dough should not be wasted. When it has served to show when the loaves are ready for the oven, place it in a small greased tin, let it stand about 15 minutes, then bake it while the loaves are still in the oven.

[2] This browned flour should be saved and used for thickening gravies or sauces.

in the oven during baking helps to give the bread a tender crust and prevents scorching.

After baking place the loaves on a cooling rack or else across the edges of the pans and allow to cool thoroughly. Do not cover meanwhile unless it is necessary to prevent contamination by dust or flies. When thoroughly cool, place the loaves in a perfectly clean, well-aired, and covered box of tin or aluminum or in a stone crock.

In making any of the breads which contain substances other than wheat flour it is possible to use either more or less of these substitutes than called for in the accompanying recipes. These recipes are based on the amounts which will make attractive loaves, both in appearance and in flavor. If more of the flour substitute is used, the volume of the loaves may be a trifle smaller, the texture will be a little poorer, and the flavor of the substitute will be more noticeable.

METHOD OF MAKING BREAD.

Short Process or Straight-Dough Method for Wheat Bread.

(Enough for four loaves.)

- 3 quarts (12 cups) sifted flour (more if necessary).
- 2 cakes compressed yeast or 1 cup liquid yeast.
- 1 quart lukewarm liquid (water, milk, or equal parts of water and milk).
- 4 teaspoons salt.

Flours vary so much in their ability to take up water that approximate quantities only can be given. In general, more than specified in these recipes will be required if a *soft* flour is being used.

When liquid yeast is used its volume must be included in the total liquid required.

Mix the yeast until smooth with a small amount of lukewarm liquid. Dissolve the salt in the rest of the liquid, add to the yeast, and mix thoroughly with the flour, so that all the latter may be worked in. Knead the mass until smooth and elastic, which will require not more than 10 to 15 minutes. Cover the bowl, place it in its warm place, and allow the dough to rise until light (about 1¾ hours). In the case of a good bread flour the dough will have risen to about three times the original volume.

Cut down the dough from the sides of the bowl and knead. Should the dough be too soft, add a little flour at a time, kneading until it is smooth and elastic. If the dough be too stiff, add a little water, working it in well, and knead until the dough no longer sticks to the fingers or bowl. Cover and set aside in the same warm place until very light (one hour or more).

Cut down from the sides of the bowl and knead again just enough to expel the large bubbles of gas. Cut off a bit of dough to serve as an "indicator"; divide the rest into four equal portions, mold each quickly, stretching the outside of the loaf and pinching together underneath; place crease side down in lightly greased pans which have been warmed but are not hot. Set the loaves in the same warm place and allow to rise 50 minutes to 1 hour, or until the indicator shows two to three times the original volume, depending upon the kind of flour used. (See "indicator" on page 5.) Place in the oven and bake about 50 minutes. The oven should be at about 425° F. at first and may then decrease gradually until about 375° F.

Long Fermentation Method—Overnight Sponge.

(Enough for four loaves.)

3 quarts (12 cups) sifted flour (more if flour is soft).
1 cake yeast (dry or compressed), or ½ cup liquid yeast.
1 quart lukewarm liquid.
4 teaspoons salt.

When liquid yeast is used its volume must be included in the total liquid required.

If dry yeast is used it should be soaked in some lukewarm water for 20 minutes to 1 hour before mixing with the flour. This amount of water will form part of the total liquid required for mixing.

In the evening measure out into the mixing bowl one-half the required amount of flour and, if the weather be cold, warm slightly. Mix the yeast, rubbed smooth, with two-thirds of the total amount of lukewarm liquid in which has been dissolved the salt. Add this yeast mixture to the flour, beat thoroughly, cover, and place where it will be at from 60° to 75° F. In weather moderately warm neither the flour nor the water need be heated. In hot weather it is better not to set a sponge overnight, since there is great danger of it turning sour before morning, unless the dough can be kept cool enough.

In the morning beat up the sponge thoroughly, add the remaining one-third of liquid, which may be warm enough to bring the temperature of the sponge up to 80° to 88° F. Next add the warmed flour and knead. Should the dough be too soft or too stiff, add flour or liquid, a little at a time, kneading it in thoroughly until a dough of the proper consistency is formed; knead until the dough is smooth and elastic and no longer sticks to the bowl or fingers. Cover and set where it will be kept at about 80° to 88° F. Allow to rise two hours, or until quite light.

From this point continue exactly as directed for molding and baking under "Straight-dough method."

Short Sponge Method.

Many experienced bread makers believe that the sponge method yields a bread superior in texture and volume to that made by the straight-dough process, in which all the materials are mixed at once. It is well known, however, that a long fermentation, such as the overnight sponge, causes the bread to lose much of the sweet nutty flavor of the wheat, while the gluten of the flour used in the sponge becomes much weakened. With a short fermentation, however, the bread will have good texture and volume without loss of flavor. Slightly more labor is required to prepare bread by the sponge method than by the quick or straight-dough process.

Short sponge process: Blend ¼ to ½ cake compressed yeast (or 4 tablespoons liquid yeast)[1] with 1 cup lukewarm liquid in which has been dissolved 1 teaspoon salt. Add this to 1½ cups sifted flour, mixing carefully to avoid lumping. Beat thoroughly until smooth, cover and set to rise in a moderately warm place (80 to 88° F.). When thoroughly light beat up this sponge, add to it the required amount of substitute (¾ to 1 cup), and knead in enough more flour to make a dough of the proper consistency. Knead until smooth and elastic. Cover, allow to rise again, then knead down, mold into a loaf, and finish as usual.

[1] When liquid yeast is used its volume must be deducted from the total liquid.

BREAD FROM GENUINE WHOLE-WHEAT OR GRAHAM FLOUR.

When wheat is simply reduced to a meal by grinding it once or twice and not removing from it any bran, etc., it is known as Graham flour. This is genuine whole-wheat flour and might well be termed "wheat meal." Our ordinary flour consists of only about 75 per cent of the whole wheat, 25 per cent or more being removed by sifting and bolting and sold for stock feed as bran, shorts, etc. If, then, we use Graham flour in baking, or this 100 per cent wheat meal, it is equivalent to a mixture of 75 per cent of ordinary flour and 25 per cent of flour substitute.

Some housewives find it difficult to get Graham flour, even though wheat may be grown locally. If one does not object to the labor required, one may prepare her own wheat meal with the aid of a hand gristmill,[1] such as is used for grinding chicken feed. The wheat should first be washed quickly, then thoroughly dried, and ground to any desired fineness as needed.

Graham or Whole-Wheat Bread.

(1 loaf.)

3 cups or more Graham flour or wheat meal.
1¼ cups lukewarm liquid.
1 teaspoon salt.
2 tablespoons sirup.
⅙ to ½ cake yeast (dry or compressed), or
2 to 4 tablespoons liquid yeast (deduct from other liquid).

Short process.—Dissolve the salt and sirup in 1 cup lukewarm liquid, and to this add ½ cake compressed yeast blended with ¼ cup lukewarm water (or 4 tablespoons liquid yeast). Mix with this sufficient Graham flour to form a dough not too stiff. Knead until smooth and elastic. Cover and allow to rise until quite light (at least double in bulk). Knead down, mold, place in greased pan, and allow to rise until just double in volume. Bake at least one hour in a moderately hot oven. If desired the dough may be allowed to rise twice before being molded for the pan.

Long process.—Make a sponge of ¾ cup lukewarm liquid, 1 teaspoon salt, ⅙ cake yeast (dry[2] or compressed), blended with ¼ cup lukewarm water (or 2 tablespoons liquid yeast), and 1½ cups Graham flour. Cover and let rise overnight or until very light. In the morning break up this sponge, add ¼ cup liquid at about 90° F. and 2 tablespoons sirup, and enough more Graham flour to make a dough not too stiff. Knead until smooth and elastic. Mold and finish as directed above, or allow to rise a second time before molding.

Quick Graham-Kafir or Rice Rolls.

(12 rolls.)

2 cups Graham flour.
1 cup Kafir flour or ground rice.
1 cup (or more) lukewarm liquid.
1 teaspoon salt.
2 tablespoons sirup.
1 tablespoon shortening (melted).
⅙ to ½ cake yeast (dry or compressed), or 2 to 4 tablespoons liquid yeast.

Make a sponge with 1½ cups Graham flour, 1 cup lukewarm liquid, the salt, and yeast. Cover and allow to rise until quite light. Break up this sponge,

[1] Such a mill will be found convenient for grinding many other materials, such as corn, rye, soy beans, etc. Meals of any desired fineness may thus be obtained, with the full flavor of the fresh material.

[2] When dry yeast is used it must be soaked in a portion of the liquid and soaked for 20 minutes to 1 hour before adding to the sponge.

add to it the sirup, the shortening, 1 cup kafir or rice flour, and the remaining ½ cup Graham flour. If necessary add enough more liquid to form a soft dough (as for drop biscuits). Beat until smooth and drop at once into greased muffin pans (half full). Let rise until just double in bulk, then bake about 25 to 30 minutes in a moderate oven.

Other substitutes, such as rolled oats, buckwheat, barley, feterita, etc., may be used in place of the kafir.

BREAD MADE WITH WHEAT SUBSTITUTES.

CORN-MEAL BREAD.

(One loaf.)

1 cup corn meal.
3 cups wheat flour.
1 teaspoonful salt.
1 tablespoonful sirup, if desired.
1 cup (or more) lukewarm liquid.
⅛ to ½ cake yeast, dry or compressed, or 2 to 4 tablespoonfuls liquid yeast.

Short process.—Sift together the flour and meal. Mix ½ cake compressed yeast or 4 tablespoonfuls of liquid yeast with a little of the lukewarm liquid and add to it the remainder of the liquid, in which has been dissolved the salt (and the sirup if used). Blend this yeast mixture with the dry material until all the latter is incorporated, using a little additional liquid if necessary. Cover and set to rise. When light knead down, mold, and finish as usual or allow to rise a second time until light before molding and placing in pan.

Long process.—Make a sponge of 1½ cups wheat flour, ½ cup lukewarm liquid in which has been dissolved 1 teaspoonful salt and 2 tablespoonfuls of liquid yeast or ⅛ cake yeast, dry or compressed, blended with ¼ cup lukewarm water. Cover and set to rise over night. In the morning (or when thoroughly light) add ¼ cup water at about 90° F., the sirup if desired, and the sifted mixture of 1 cup corn meal and 1½ cups wheat flour. Knead thoroughly until a smooth elastic dough is formed, adding a little more liquid if necessary. Cover and allow to rise until quite light. Knead down, mold into a loaf, and finish as usual. Any other finely ground meal or flour made from corn may be used in place of corn meal.

ROLLED-OATS BREAD.

(1 loaf.)

¾ cup (packed) rolled oats.
2¼ cups (or more) wheat flour.
1 cup liquid.
1 teaspoon salt.
1 tablespoon sirup if desired.
⅛ to ½ cake yeast (dry or compressed), or 2 to 4 tablespoons liquid yeast (deduct from total liquid).

Scald the oats with ¾ cup boiling water in which have been dissolved the salt and sirup; cover and allow to cool until lukewarm. Blend the yeast cake with ¼ cup lukewarm liquid (or use liquid yeast); add to the cooled oats and work in as much of the flour as possible. Cover and set to rise until light. If the dough seems soft at this time, work in enough more flour until of the proper consistency. Knead until fairly smooth and elastic. Cover and let rise again. When quite light knead down, mold, place in greased pan, and allow to rise until about 2½ times its bulk, according to the "indicator." Bake about one hour in a moderate oven.

Corn meal may be used in place of the oats in the above recipe.

BARLEY OR BUCKWHEAT BREAD.

(1 loaf.)

¾ cup barley or buckwheat[1] flour.
2½ cups (or more) wheat flour.
1 cup lukewarm liquid.
1 teaspoon salt.
1 tablespoon sirup (if desired).
⅙ to ½ cake yeast (dry or compressed), or
2 to 4 tablespoons liquid yeast (deduct from total liquid).

Short process.—Dissolve the salt in the cup of liquid and mix with this one-half cake compressed yeast blended with a little of the liquid, or 4 tablespoons liquid yeast. Add this yeast mixture to the well-blended flours, stirring until well mixed. Cover and allow to rise until light (at least double in volume). Knead thoroughly, cover, and let rise a second time. When quite light knead down, mold, place in greased pan, and let rise in pan until two and one-half times its bulk, according to the "indicator." Bake 50 minutes to 1 hour.

Long process.—Make a sponge of 1½ cups wheat flour, 1 cup lukewarm liquid, 1 teaspoon salt, and ⅙ cake yeast, dry or compressed (or 2 tablespoons liquid yeast). Beat thoroughly, cover, and let rise over night or until quite light. Break up this sponge, add the barley or buckwheat flour and enough more wheat flour to make a dough of medium stiffness. Knead until smooth and elastic. Cover and let rise until very light. Knead down, mold, and finish as directed under short process above.

PEANUT BREAD.

(1 loaf.)

1 cup lukewarm liquid.
1 teaspoon salt.
3 cups flour (more if necessary).
1 or 2 tablespoons sirup.
1 cup peanut meal or peanut flour.[2]
⅙ to ½ cake yeast (dry or compressed), or
2 to 4 tablespoons liquid yeast (deduct from other liquid).

Short process.—Dissolve the salt and sirup in the cup of lukewarm liquid. Mix with it the compressed yeast (½ cake) blended with a small portion of the liquid or 4 tablespoons liquid yeast, and add all to the mixture of flour and peanut meal. Knead until smooth and elastic, adding more flour or liquid, if necessary, to secure proper consistency. Cover and let rise until quite light. If desired, knead down and let rise a second time until very light. Then knead lightly, pinch off a bit for the indicator, mold the rest, place in greased pan, cover and let rise until at least two and one-half times the original bulk. Bake 50 to 60 minutes in a moderately hot oven (400° F).

Long process.—Make a sponge of ½ cup lukewarm liquid, 1 teaspoon salt, ⅙ cake yeast, dry or compressed, dissolved in ¼ cup lukewarm water (or 2 tablespoons liquid yeast), and 1½ cups flour. Beat well, cover and set aside where it will be between 60° and 70° F. if possible. When thoroughly light add to this sponge ¼ cup water at about 90° F., to which has been added the sirup, and the mixture of peanut meal and 1½ cups flour. Knead until smooth and elastic, adding more flour or liquid if necessary. Cover and set aside until quite light. Then knead down, mold, and finish as directed under the short process.

Any other dry meal or flour obtained from corn, rice, kafir, milo, feterita, millet, chick pea, navy beans, peas, chestnuts, bananas, dasheen, or cassava

[1] In yeast bread the plain buckwheat flour, *not self-rising* buckwheat flour, should be used.

[2] Peanut meal may be prepared by shelling roasted peanuts, removing red skin, and crushing the nuts with a rolling pin or putting them through a food chopper.

may be used in place of the peanut meal in the above recipe. Somewhat more liquid will probably be required with these other meals than when peanut is used.

Potato Bread.

(One loaf.)

1 cup mashed sweet or Irish potatoes.
1 teaspoon salt.
1 tablespoon sirup, if desired.
4 tablespoons lukewarm water.
2½ cups or more sifted flour.
⅛ to ½ cake yeast (dry or compressed), or 2 to 4 tablespoons liquid yeast.[1]

Use left-over boiled or baked potatoes or boil potatoes in their skins until tender. Peel and mash the potatoes or put them through a colander or ricer to free them from lumps.

Short process.—To 1 cup of the cool mashed potato add 1 teaspoon salt, 1 tablespoon sirup, and ½ cake compressed yeast mixed with 4 tablespoons lukewarm water, or 4 tablespoons liquid yeast. Mix with this ½ to 1 cup sifted flour, stirring until thoroughly blended. Cover and allow to rise until soft and light (about 2 hours). Knead in enough more flour to make a dough somewhat stiffer than for white bread. If the potatoes are rather dry or mealy, a little additional water may be required. Knead until smooth and elastic. Cover and let rise again until very light. Then knead down, mold and finish as usual. Allow to rise in the pan until two and one-half to three times the original bulk. Bake slowly in a moderately hot oven at least 50 minutes.

Long process.—To 1 cup of the cool mashed potatoes add 1 teaspoon salt and ⅛ cake yeast, dry or compressed, mixed with 4 tablespoons lukewarm water, or 2 tablespoons liquid yeast. Add to this ½ to 1 cup sifted flour, cover and set to rise where it will be between 60° to 70° F. When thoroughly light and soft add to it the sirup and knead in enough more flour to form a smooth, elastic, and rather stiff dough. Cover and allow to rise again until very light. Then knead down, mold, and finish as directed under short process.

Cooked or baked squash, pumpkin, peas, beans, or dasheen may be used in place of the potato.

More potato (or other cooked substitute) may be used and less water. E. g., with 1⅔ cups mashed potato only 2 tablespoons water per loaf are required. Less flour also will be needed.

Rice Bread.

(1 loaf.)

1 cup boiled rice.
1 teaspoonful salt.
1 tablespoon sirup, if desired.
4 tablespoons lukewarm water.
2½ cups or more sifted flour.
⅛ to ½ cake yeast (dry or compressed), or 2 to 4 tablespoons liquid yeast.[1]

Left-over rice may be used, or broken rice may be especially cooked for this purpose, using one-half cup uncooked rice with 1 cup water for each loaf to be made. Cook rice until very tender, and, if desired, put it through a ricer or colander.

Follow directions given under potato bread, using cooked rice instead of the potato.

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[1] When liquid yeast is used it must be included in the total liquid.

Corn-Meal Mush Bread.

(1 loaf.)

1 cup corn-meal mush, cooked grits, or fine hominy.
1 teaspoon salt.
1 tablespoon sirup, if desired.
4 tablespoons lukewarm water.
2½ cups or more sifted flour.
⅛ to ½ cake yeast (dry or compressed), or 2 to 4 tablespoons liquid yeast.[1]

Use left-over mush, grits, or fine hominy, or prepare a mush from two-thirds cup dry corn meal and 1⅓ cups water. Cook 10 minutes to one hour in a double boiler, or in a vessel placed in another containing boiling water. Cool the mush until lukewarm, then follow directions for making bread given under potato bread, substituting corn-meal mush for the potato.

Any other cooked cereal, either prepared for this purpose or left-over portions, may be used in place of the corn-meal mush. If the cereal has been previously salted use only two-thirds teaspoon salt per loaf.

Soy-Bean Bread.

(1 loaf.)

1 cup soy-bean meal or flour.
3 cups sifted flour (more if necessary).
1 teaspoon salt.
1 tablespoon sirup.
1 cup lukewarm liquid (more, if necessary).
⅛ to ½ cake yeast (dry or compressed), or 2 to 4 tablespoons liquid yeast (deduct from other liquid).

Short process.—Dissolve the salt and sirup (if used) in three-fourths cup of liquid; heat this to boiling and pour it over the soy-bean meal, mixing thoroughly. Let stand until lukewarm; add to it the compressed yeast (one-half cake), blended with one-fourth cup lukewarm liquid or 4 tablespoons liquid yeast, and the flour. Knead until smooth and elastic. Cover and let rise in a moderately warm place until quite light. Knead lightly, mold, place in greased pan, cover, and let rise until just double in bulk. Bake 50 to 60 minutes in a moderately hot oven (400° F.), reducing the heat at the end of the first 10 or 15 minutes.

Long process.—Follow directions given for peanut bread (long process), using soy-bean meal in place of the peanut. After molding the soy-bean loaf let it rise in the pan only until double in volume. Bake slowly in a moderately hot oven 50 to 60 minutes.

The addition of raisins or chopped dates to this loaf makes a delicious bread.

Light Rolls With Dry Wheat Substitutes.

(Enough for 12 small rolls.)

2¼ cups sifted flour (more if necessary).
¾ cup wheat substitute (corn meal, corn or rice flour, rye, oatmeal, soy-bean meal, peanut meal, kafir, milo, etc.).
1 cup milk (or part milk and part water).
2 tablespoons lukewarm water.
1 teaspoon salt.
2 tablespoons sirup.
1 tablespoon shortening.
½ cake yeast (dry or compressed), or ¼ cup liquid yeast.

[1] When liquid yeast is used it must be included in the total liquid.

Scald the milk, and while hot dissolve in it the salt, sirup, and shortening. When cooled until lukewarm, add to this the yeast rubbed smooth with 2 tablespoons lukewarm water. (When liquid yeast is used, its volume must be deducted from the total liquid. If dry yeast is used it should be soaked for an hour in the 2 tablespoons of water before adding it to the other ingredients.)

Measure into a bowl 1½ cups of sifted flour and add to this gradually the mixture of milk, salt, sirup, shortening, and yeast, so that it will be free from lumps. Beat well, cover, and set aside to rise.

When this sponge is quite light beat until smooth and add to it gradually the mixture of ¾ cup of flour and ¾ cup of wheat substitute, sifted together. Knead until a smooth, elastic dough is formed, adding more flour if required. Cover and set aside to rise. When very light, knead again until smooth. Cut or break off small pieces about the size of a hen's egg, roll between the palms of the hands until round and smooth, and place in greased biscuit tins, not too closely together. Reserve one piece for an indicator. Allow to rise in the pans until 2½ or 3 times the original volume, and bake in a moderately hot oven 20 to 25 minutes.

LIGHT ROLLS WITH COOKED SUBSTITUTES.

(About 12 small rolls.)

When the sponge made with cooked materials, such as potatoes,[1] rice, corn meal, oatmeal, etc., is light, add to a one-loaf portion 1 tablespoon melted shortening and 2 tablespoons sirup. Knead in thoroughly enough flour to make a smooth, elastic dough. Let rise again until very light. Knead down, break or cut off small pieces the size of an egg, roll between the palms of the hands until round and smooth, and place not too closely together in greased biscuit tins. Allow to rise until 2½ or 3 times the original volume, then bake in a moderately hot oven about 25 minutes, or until well done within.

Bake all bread containing cooked substitutes a little more slowly and longer than ordinary breads.

QUICK OR HOT BREADS.

In any of the following recipes sour milk or buttermilk and soda may be substituted for sweet milk (or water) and baking powder. To guard against an excess of soda, which causes a yellow color in the bread and a less agreeable flavor, use one-half to three-fourths level teaspoonful of soda to every cupful of sour milk. The soda may be sifted with the other dry ingredients, as is recommended when using baking powder, insuring thorough mixing and less loss of leavening gas.

In using either baking powder or sour milk and soda, all materials should be as cold as possible, especially the liquid, and (in case of biscuits) the shortening as well.

The mixing should be done as quickly as possible, especially after the baking powder is moistened, to minimize the loss of leavening gas. Biscuits should be rolled, cut, and placed in the pans as soon as possible after mixing. If necessary, they may stand in the pans before baking with comparative safety.

[1] See directions for potato bread, p. 11.

BISCUITS.

Fifty Per Cent Flour Substitute Biscuit.

Any meal or flour made from corn, rice, oats, rye, barley, kafir, milo, feterita, soy bean, peanuts, chestnut, dasheen, sweet potato, Irish potato, etc., may be used as a substitute.

2 cups of any of the substitutes mentioned above.
2 cups wheat flour.
4 teaspoons baking powder.[1]
2 teaspoons salt.
4 tablespoons shortening.
Liquid sufficient to mix to proper consistency (1 to 1½ cups).[1]

Sift together the flour, meal,[2] salt, and baking powder twice. Have the shortening as cold as possible and cut it into the mixture with 2 knives, finally rubbing it in with the hands. Mix quickly with the cold liquid (milk, skim milk, or water), forming a fairly soft dough which can be rolled on the board. Turn onto a floured board; roll into a sheet not over ¼ inch thick; cut into rounds; place these in lightly floured biscuit tins (or shallow pans), and bake 10 to 12 minutes in a rather hot oven.

Corn-Meal, Peanut, and Wheat Biscuits.

1 cup corn meal.
1 cup peanut meal (soy-bean meal may be used instead).
Liquid sufficient to mix (1 to 1½ cups).
2 teaspoons salt.
4 teaspoons baking powder.
3 tablespoons shortening.
2 cups wheat flour.

Mix, roll, cut, and bake as directed for 50 per cent substitute biscuits.

Wheat-Meal Biscuits.

4 cups Graham flour or home-ground wheat meal.
2 teaspoons salt.
4 teaspoons baking powder.
2 tablespoons sirup, if desired.
4 tablespoons shortening.
Liquid sufficient to mix (about 1½ cups).

Mix, roll, cut, and bake as directed for 50 per cent substitute biscuits.

Corn Meal-Graham Biscuits.

1 cup Graham flour (or home-ground wheat meal).
1 cup corn meal.
1 cup sifted wheat flour.
Liquid sufficient to mix (1 to 1¼ cups).
1½ teaspoons salt.
1 tablespoon sirup or molasses.
3 teaspoons baking powder.[1]
3 tablespoons shortening.

Mix, roll, cut, and bake as directed for 50 per cent substitute biscuits.

Other variations may be made by replacing the corn meal in the above by soy-bean meal, rice polish, shorts from wheat, or any of the substitutes named above.

Potato Biscuits.

2 cups sifted flour.
1 teaspoon salt.
3 teaspoons baking powder.
1 cup mashed potato.
3 tablespoons shortening.
Liquid sufficient to mix.

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[1] In place of baking powder and sweet milk or water, ¾ to 1 teaspoon of baking soda and 1½ cups sour milk or buttermilk may be used.

[2] In using peanut meal the flour and other dry ingredients should be sifted together twice and then mixed thoroughly with the peanut meal. Roasted and shelled peanuts may be crushed with a rolling pin and used in place of peanut meal.

Sift together twice the flour, salt, and baking powder. Cut or rub into this the cold shortening. In the same way rub into this flour mixture the mashed potato. Finally add just enough cold liquid to make the mass cling together. Do not knead. Place on floured board, roll until ½ inch thick, cut into rounds. Place these in lightly floured biscuit tins and bake 15 to 20 minutes in a moderately hot oven. Bake all potato breads more slowly than those made with flour alone.

GEMS.

Entire Corn-Meal or Wheat-Meal Gems.

2 cups corn meal or wheat meal (Graham flour).
1 teaspoon salt.
2 tablespoons sirup.
2 teaspoons baking powder.
1 egg.
1 tablespoon shortening.
Liquid to mix to a medium batter (1 to 1½ cups).

Sift together the meal, salt, and baking powder twice, returning the bran, which has been retained on the sifter, to the mixture and blending it thoroughly. To this mixture of dry ingredients add the beaten egg, the melted shortening, sirup, and milk (or water) enough to make a batter of medium consistency. Drop by spoonfuls into greased muffin or gem pans. These should be about half full. Bake 18 to 20 minutes in a fairly hot oven.

Corn, Wheat, Soy-Bean Gems.

(24 small gems.)

1 cup corn meal.
1 cup wheat meal (Graham flour).
1 cup soy-bean meal.
1½ teaspoons salt.
3 teaspoons baking powder.[1]
2 tablespoons sirup.
2 tablespoons shortening.
1 egg.
Liquid to mix to a medium batter (about 1½ cups).[1]

Follow directions given under entire Corn-Meal Geams for mixing and baking.

Other varieties may be made by substituting in the latter recipe peanut meal, oatmeal, rice flour, rice polish, or rye flour for soy-bean meal.

Buckwheat or Barley Flour Gems.

1 cup buckwheat or barley flour.
1 cup whole wheat or Graham flour.
1 teaspoon salt.
3 teaspoons baking powder.[2]
1 or 2 tablespoons sirup.
1 tablespoon shortening (melted).
1 egg.
Liquid (about 1 to 1½ cups).[2]

Mix and bake as directed under Cormeal Gems. Any other flour or meal may be used in place of buckwheat or barley in the above recipe.

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[1] In place of the baking powder and liquid, such as sweet milk or water, ¾ to 1 teaspoonful of baking soda and 1½ cups of sour milk or buttermilk may be used.

[2] In place of baking powder and sweet milk, ¾ teaspoon soda and 1 to 1½ cups sour milk may be used.

BROWN BREAD.

Brown Bread—Boston Style.

(1 loaf.)

1 cup cornmeal.
1 cup soy bean meal (or other substitute).
1 cup Graham or whole wheat flour.
1½ teaspoons salt.
1 teaspoon soda.
½ cup sirup.
¾ cup raisins.
2 cups sour milk.

Sift together the meals, flour, salt, and soda. Blend with this mixture the raisins, which have been seeded and cut. Add the sirup and enough sour milk (about 2 cups) to make a rather thick batter. Pour it into a greased container with tight lid, such as a coffee can or large baking-powder can. Do not have the container much more than half full. Tie on the lid and steam for 3 hours. It is excellent when baked in a fireless cooker.

CORN BREAD.

Eggless Cornbread.

(12 servings.)

2 cups cornmeal.
1 teaspoon salt.
3 teaspoons baking powder, 1 cup sweet milk, or
¾ teaspoons baking soda, 1 to 1½ cups sour milk.
1 tablespoon sirup.
2 tablespoons shortening.

Sift together the cornmeal, salt, baking powder (or soda). Dissolve the sirup in the milk and add this to the sifted dry ingredients. Finally add the melted shortening, beat well and pour into a greased shallow tin. Bake 25 to 30 minutes in a moderately hot oven.

Batter or Spoon Bread.

1½ cups corn meal.
1 teaspoon salt.
1 tablespoon sirup, if desired.
2 cups milk, or
1 cup milk and 1 cup water.
1 egg (or 2).
1 tablespoon shortening (melted).
2 teaspoons baking powder.

Place milk (or milk and water), salt, and meal in double boiler, or in a vessel placed in hot water, and cook for 5 to 10 minutes. Allow to cool, beating until smooth. Add the sirup, shortening, well-beaten egg, and baking powder, beating very thoroughly. Pour into a greased pan and bake about 25 minutes in a moderately hot oven.

MUFFINS.

Potato Muffins.

1½ cups cooked sweet potato (Irish potatoes may be used instead, with or without the sugar).
1½ cups wheat flour.
1 teaspoon salt.
3 teaspoons baking powder.
2 tablespoons sirup, if desired.
1 or 2 eggs.
2 tablespoons shortening.
Liquid sufficient to make a rather stiff batter (about ½ cup).

Boil the potatoes in the skins until tender; drain, peel, and mash fine. Putting the potato through a ricer or colander is better than mashing. Sift

together the flour, salt, and baking powder twice. Beat the eggs until light and add to the cool mashed potato. Next add the sirup and the melted shortening, then the flour mixture, alternating with portions of the liquid, until a batter is formed somewhat stiffer than for ordinary flour muffins. Drop by spoonfuls into greased muffin pans until half filled and bake 25 to 30 minutes in a moderately hot oven.

Soy Bean, Rice, Oatmeal, Corn Meal, or Dasheen Muffins.

In the above recipe replace the cooked potato with any cooked cereal, such as rice, oatmeal, corn meal, or with cooked soy-bean meal, cooked or baked dasheen, etc. When using any substance containing cooked starch it is necessary to have the batter rather stiffer than for wheat-flour muffins.

Potato-Corn Meal Muffins.

(15 muffins.)

1 cup mashed sweet or Irish potato.
1 cup corn meal.
½ cup sifted flour.
1½ teaspoons salt.
3 teaspoons baking powder.
2 tablespoons sirup.
2 tablespoons shortening.
1 or 2 eggs.
Liquid to mix to a medium batter (¼ to ¾ cup).

Add the corn meal, salt, sirup, and ½ cup liquid to the hot mashed potato, place in double boiler, and steam 10 minutes. Add the shortening and allow to cool thoroughly. When cold add the well-beaten eggs and the flour, which has been sifted with the baking powder. Add enough more liquid, if necessary, to make a somewhat stiff batter. Beat thoroughly, place in gem pans until half filled, and bake about 25 minutes in a moderately hot oven.

Bread Muffins.

1½ cups dry bread crumbs.
1 cup milk.
½ teaspoon salt.
2 teaspoons baking powder.
1 egg.
1 tablespoon shortening.
2 tablespoons sirup.
½ cup flour.

Scald the milk, add the crumbs, allow to stand 15 minutes, then mash and beat to a paste. Add the salt, sirup, beaten egg yolk, melted shortening, and the flour and baking powder sifted together. Finally fold in the beaten egg white. Pour into gem pans until half filled, then bake about 20 minutes in a moderately hot oven.

Pumpkin-Corn Meal Dodgers.[1]

1½ cups cooked pumpkin.
1 teaspoon salt.
1½ cups corn meal.
3 tablespoons shortening.
2 tablespoons sirup.

To the pumpkin, which has been cooked very tender and mashed free from lumps, add the salt, sirup, melted shortening, and corn meal and mix thoroughly. Have the mixture just soft enough to take up by spoonfuls and pat into flat cakes in the hand. Place on a griddle or greased baking sheet and bake about 20 minutes in a hot oven.

If desired, the corn meal may be added to the hot pumpkin and allowed to steam with the latter for 10 minutes before adding the other ingredients.

[1] Based on an old southern recipe handed down through several generations.

Sweet Potato-Corn Meal Dodgers.

Substitute cooked or baked sweet potato for the pumpkin in the previous recipe, adding a little liquid, if necessary, to give the required consistency.

DUMPLINGS.

Corn Meal Dumplings.

(To serve with stews, smothered chicken, etc.)

3 tablespoons corn meal or corn flour.
6 tablespoons wheat flour.
⅛ teaspoon salt.
1 teaspoon baking powder.
1 egg.
Milk if necessary.

Sift together the flour, meal, salt, and baking powder. Beat the egg very light and add to the dry materials. Add milk, if necessary, until a soft mixture as for muffins is formed. Drop by teaspoonfuls into the vessel containing the boiling stew. Cover the vessel and steam about 10 minutes without removing the lid.

GRIDDLE CAKES.

Bread Griddle Cakes.

1½ cups dry bread crumbs.
1½ cups sweet milk.[1]
½ teaspoon salt.
1 tablespoon sirup.
1 egg.
1 tablespoon shortening.
½ cup flour.
2 teaspoons baking powder.[1]

Scald the milk, add the crumbs, let stand 15 minutes, then mash and beat to a paste. Add the salt, sirup, melted shortening, and well-beaten egg. Finally add the flour and baking powder, which have been sifted together. Bake on a hot griddle until nicely browned on both sides.

Corn Meal-Graham Griddle Cakes.

1 cup corn meal.
1 cup Graham flour or wheat meal.
1 teaspoon salt.
1 tablespoon sirup.
1 teaspoon baking soda.
1 egg.
2 tablespoons hot water.
2 cups sour milk.

Scald the meal with a little boiling water in which has been dissolved the salt; cover and allow to cool. When cold add to it the sirup, the well-beaten egg, one cup of the milk, then the Graham flour, the soda dissolved in the hot water, and lastly the remaining milk, or enough to yield a batter which will pour easily, but is not too thin. Beat thoroughly. Bake until well browned on both sides.

Potato-Corn Meal Griddle Cakes.

1 cup mashed potato.
1 cup corn meal.
½ cup flour.
1 teaspoon salt.
2 teaspoons baking powder.
1 tablespoon sirup.
1 tablespoon shortening (melted).
1 egg.
Liquid sufficient.

Add the salt, sirup, and one-half cup milk or water to the mashed potato, then blend with this the corn meal. Heat and stir frequently until the meal is scalded or cook for about five minutes. Remove from the fire and cool. When cold

[1] In place of baking powder and sweet milk alone, ½ cup sweet milk may be used to moisten the crumbs and 1 cup of sour milk with ¾ teaspoon baking soda for thinning and leavening the mixture.

add to this mixture the shortening, the well-beaten egg, the flour and baking powder sifted together, and enough liquid (milk or water) to make a medium batter, not too thin. Bake slowly and thoroughly.

WAFERS, COOKIES, ETC.

Fifty Per Cent Soy-Bean Wafers.

1½ cups soy-bean meal.
1½ cups sifted flour.
1 teaspoon salt.
½ cup sirup.
2 teaspoons baking powder.
3 tablespoons sugar.
2 tablespoons shortening.

Sift together the flour, soy-bean meal, salt, and baking powder twice. Cream together the sugar, sirup, and shortening. Alternately add the flour mixture and a little milk until the dough is of such consistency that it can be rolled on the board. Turn onto a floured board; roll very thin (about ⅛ inch thick); cut with a biscuit cutter; place in greased shallow pans and bake 10 minutes in a fairly hot oven or until a delicate brown.

Fifty Per Cent Peanut Wafers.

2 cups Graham flour.
1½ cups crushed peanut meats.
1 teaspoon salt.
2 teaspoons baking powder.
1 egg.
¾ cup sirup with 2 tablespoons sugar (or ¾ cup honey).
2 tablespoons shortening.

Sift the salt and baking powder with the flour, returning the bran to the mixture, and mix with this the peanuts which have been lightly crushed with a rolling-pin. Cream together the shortening, sirup, and sugar (or honey), add to this the well-beaten egg, then the flour and peanut mixture. Use a little milk if necessary to make a dough of such consistency that it can be rolled on the board. Turn onto a floured board, roll thin, and cut with a biscuit cutter. Place in shallow tins lightly greased and bake in a fairly hot oven until a delicate brown (about 10 minutes).

Corn Meal Cookies.

1½ cups sifted flour.
1½ cups fine corn meal.
1 teaspoon salt.
2 teaspoons baking powder.
½ cup sirup with 3 tablespoons sugar (or ½ cup honey).
3 tablespoons shortening.
1 egg.
1 teaspoon vanilla extract.
Milk sufficient to mix.

Follow directions given for soy-bean wafers, adding, however, the well-beaten egg to the creamed shortening, sirup and sugar, then the flavoring extract, and finally the flour mixture and milk if necessary. Roll thin, cut and bake until a delicate brown.

Potato Cookies.

2 cups sifted flour.
½ teaspoon salt.
2 teaspoons baking powder.
¾ cup brown sugar.
3 tablespoons shortening.
1 egg well beaten.
1 cup mashed potato.

Cream together the shortening and sugar. To this add the well-beaten egg and the mashed potato (free from all lumps). Beat until smooth, then add the twice-sifted mixture of flour, salt, and baking powder. It will usually not be necessary to add any liquid. Mix until a dough is formed stiff enough

to roll. Place on floured board, roll until about ⅛ inch thick, cut into rounds and place on greased baking sheet. Bake 15 minutes in a moderately hot oven or until a delicate brown. Bake more slowly than ordinary wheat-flour cookies.

Oatmeal Drop Cakes.

¾ cup brown sugar or honey or 1 cup sirup.
3 tablespoons shortening.
1 egg.
2 teaspoons baking powder.
2 cups rolled oats.
1 cup flour.
1 teaspoon salt.
⅔ cup raisins or nuts.

Milk (about ¾ cup) enough to make soft dough. (Omit this if sirup or honey is used).

Cream together the shortening and sugar (or sirup) and add to it the beaten egg. Sift together the flour, salt, and baking powder. Mix with this the rolled oats and the seeded raisins or nuts cut fine. Add these dry ingredients to the egg mixture, with just enough milk, if necessary, to form a rather soft dough. Drop by teaspoonfuls onto a greased tin or baking sheet and bake about 15 minutes in a moderately hot oven.

Graham Drop Cakes.

Follow directions for oatmeal drop cakes, using 3 cups of Graham flour in place of the mixture of rolled oats and white flour.

PASTRY.

Delicious, crisp pie crust and other plain pastry may be made by using at least 50 per cent of such substitutes as corn meal, corn flour, rice flour, sweet potato flour, rye flour, or Graham. The pastry is made in the same manner as usual, but the dough can not, as a rule, be handled well if it is rolled too thin. A little practice will, however, teach the housewife how she can best handle it.

Corn Meal Pie Crust.

(2 crusts.)

⅔ cup corn meal or corn flour.
⅔ cup flour.
½ teaspoon salt.
½ teaspoon baking powder.
2⅓ tablespoons shortening.
Cold water to mix.

Sift together the meal, flour, salt, and baking powder. Cut in and blend the shortening with the dry materials. Mix to a stiff dough with a little cold water. Roll rather thin and use like other pastry. If a richer upper crust is desired, the latter, when rolled once, may be spread with additional shortening, folded over into thirds, and rolled again.

Any other fine meal or flour, such as rice, rye, sweet potato, etc., may be substituted for corn meal in the above recipe.

The above recipe may be used for crackers also. Roll thin, cut into desired shape, and bake until crisp and a delicate brown. Cheese straws may be made by rolling this same pastry thin, sprinkling over it 1 to 2 tablespoons grated cheese, folding into thirds, and rolling again. Cut into narrow strips and bake to a delicate brown.

GRAHAM OR WHOLE WHEAT PIE CRUST.

(2 crusts.)

1½ cups Graham flour.
½ teaspoon salt.
½ teaspoon baking powder.
2½ tablespoons shortening.
Cold water to mix.
(1 teaspoon of sweetening is an improvement.)

Sift together dry ingredients, blend shortening with same. Mix to dough of proper consistency with cold water in which has been dissolved the sirup or other sweetening. Roll, cut, and bake as usual.

GRAHAM SHORTCAKE.

2 cups Graham flour.
1 teaspoon salt.
3 teaspoons baking powder.
3 tablespoons shortening.
1 or 2 tablespoons sweetening.
Milk to mix.

Sift together the Graham flour, salt, and baking powder, returning the bran to this mixture. Blend with this the cold shortening as for biscuits. Mix with milk (in which has been dissolved the sirup) to form a soft dough. Roll on board in two sheets or spread in two tins. When baked spread with butter and cover with fruit which has been well sweetened.

SCORING BREAD.

The following score card applies to light bread made from white flour. When using wheat substitutes it must be remembered, first, that the volume of the loaf will not usually be as large as that made with white flour; second, that the color of the crumb will not usually be creamy—it will often be dark or distinctly colored; third, that the texture of the crumb may not be as good as that made with white flour alone.

In scoring breads made with wheat substitutes only those of the same kind should be scored together.

Bread score card.

	Points.
1. General appearance (form, smoothness of crust, uniformity and depth of color)	15
2. Size and lightness of loaf	10
3. Crust (crispness, tenderness)	10
4. Crumb—Color	5
5. Crumb—Texture (fineness and uniformity of grain)	10
6. Crumb—Elasticity (softness, pliability, springiness)	10
7. Flavor and odor	40
	100

It is very helpful, especially for a beginner in the art of bread making, to know what the characteristics of a good loaf of bread are.

Appearance.—First of all, bread should be attractive in appearance. This requires that it should be of good shape, evenly rounded

on top, with a smooth unbroken crust, having neither breaks nor bulges. It should be of a uniform golden brown color over the entire loaf.

Lightness.—It should be light, i. e., be relatively large for its weight.

Crust.—When the loaf is cut the crust should be found of even thickness over the entire loaf and should be crisp and tender rather than hard and tough.

Color of crumb.—The crumb should be of a pale creamy tint with a satiny luster or sheen as one looks across the loaf.

Texture.—The grain of the loaf should be fine and even, having many small cells, more or less uniform in size rather than fewer cells of larger size. A good bread flour, properly handled during the process of bread making, will usually yield cells oblong in shape rather than round, while the feel of it will be soft and almost velvety.

Elasticity.—The loaf should be elastic so that if pressed rather firmly between the hands it will spring back to its original shape when the pressure is removed. This elasticity is also evident if the cut portion of a loaf is pressed with the fingers and shows no impression after the pressure is removed.

Flavor.—Above everything, however, ranks flavor, for bread is made to be eaten, and no matter how attractive in appearance within or without the loaf which does not taste and smell good will never be a desirable one.